

**WHAT IS CLAIMED IS:**

1. A method for manufacturing, using a compression-moulding technique, a hollow body formed by at least two elements each of which is made of a multi-layer polymeric material comprising a barrier layer which provides a barrier to liquids and to gases, and comprising at least one other polymer layer, said method comprising:

- a) inserting the elements into an open mould comprising at least two distinct mould parts, each mould part comprising, at its periphery, a welding kerb, said welding kerbs of the two mould parts facing one another and forming a space between the two mould parts when the mould is closed, the space delimiting a shallow and broad slot and having a cross section which narrows towards the end which is the farthest away from the hollow body;
- b) gripping at least part of the ends of the elements between the welding kerbs so as to superpose the ends of the elements;
- c) compressing the mould parts so as to weld the ends of the elements together by closing the mould, and, at the same time, to force at least the barrier layers to flow into the shallow and broad slot;
- d) continuing to compress the mould parts so as to form an appendage inside the shallow and broad slot which emerges from the surface of the hollow body;
- e) opening the mould; and

- f) extracting the hollow body, which comprises on its exterior surface one or more appendages, from the mould.

2. The method according to claim 1, wherein the elements are also shaped inside the mould by injecting a blowing fluid into the mould so as to press the elements against the walls of the mould.

3. The method according to claim 1, wherein the elements are welded only over a part of the perimeter of the hollow body.

4. The method according to claim 1, wherein after opening the mould, said method further comprises folding the appendage down against the exterior surface of the hollow body.

5. The method according to claim 1, wherein after opening the mould, said method further comprises securing the appendage to the exterior surface of the hollow body.

6. The method according to claim 1, wherein after opening the mould, said method further comprises folding the appendage down against the exterior surface of the hollow body, and securing the appendage to the exterior surface of the hollow body.

7. The method according to claim 1, wherein said hollow body forms a fuel tank.

8. A compression-blow-moulding mould having a mould cavity and formed of at least two distinct mould parts, each mould part comprising, at its periphery, a welding kerb capable of gripping and welding distinct elements made of a multi-layer polymeric material, wherein the welding kerbs of the two mould parts facing one another form a space between the two mould parts, when the mould is closed, the space having a cross section which narrows towards the end which is the farthest away from the hollow body and delimiting a shallow and broad slot intended to compress the multi-layer polymeric material when the mould is being closed.